Submitted to Large Project Oversight on 08/30/2018

GENERAL INFORMATION

Program/Project Name: ND Immunization Information System (NDIIS)

Agency Name: Department of Health - Disease Control

Project Sponsor: Molly Howell **Project Manager:** Kris Vollmer

PROJECT BASELINES

Original	Project Start	Baseline	Baseline	Baseline	Actual	Schedule	Actual Cost	Cost
And	Date	Execution	End Date	Budget	Finish Date	Variance		Variance
Final		Start Date						
Original	11/25/2014	05/01/2015	04/30/2018	\$3,574,410	6/30/2018	5.8%	\$3,568,398	0.17%
Baseline						behind		Under
Final		05/01/2015	06/30/2018	\$3,932,794	6/30/2018	0%	\$3,568,398	6.4%
Baseline								Under

Notes:

MAJOR SCOPE CHANGES

- Automated client deduplication
 - o Estimate approved for \$29,000
 - o CR increased cost to \$61,190
 - o Final cost: \$64,489
 - o Completed ahead of schedule
- Documentation of NDIIS coding schema and database structure
 - o Estimate approved for \$95,120
 - Final cost \$122,060
 - o Completed 8 months behind schedule
- Upgrade to HL7 2.5.1 revision 1.5
 - Estimate approved for \$99,035
 - o CR increased cost to \$131,660
 - o Final cost \$193,162
 - o Completed 10 months behind schedule
- School Module
 - Estimate approved for \$176,605
 - o CR increased cost to \$311,555, not approved
 - o Final cost was capped at \$265,607
 - o Completed 9 months behind schedule

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PROJECT OBJECTIVES

Project Objectives	Measurement Description	Met/ Not Met	Measurement Outcome
By September 29, 2015, complete the objectives identified in the PPHF 2012 grant: https://share.nd.gov/pmo/doh/pphf2014interop/Reference%20 Documents/ProgramArea2 Narrative.doc	Progress towards achievement of the objectives will be determined by the completion of the objectives identified in the PPHF 2012 grant narrative.	Met	Work identified within the assigned grant completed within the constraints of the grant dates.
By December 31, 2015, complete the objectives identified in the Sentinel Site – Pan Flu grant: https://share.nd.gov/pmo/doh/pphf2014interop/Reference%20 Documents/IIS%20Pandemic%2 OPreparedness Narrative.doc	Measure the objectives as identified in the Sentinel Site – Pan Flu grant narrative.	Met	Work identified within the assigned grant completed within the constraints of the grant dates.
By September 29, 2016, complete the objectives identified in the PPHF 2014 grant: https://share.nd.gov/pmo/doh/pphf2014interop/Reference%20 Documents/Narrative.doc	Progress towards achievement of the objectives will be determined by the completion of the objectives identified in the PPHF 2014 grant narrative.	Met	Work identified within the assigned grant completed within the constraints of the grant dates.
By September 29, 2017, complete the objectives identified in the Sentinel Site Plan-Capacity grant: https://share.nd.gov/pmo/doh/pphf2014interop/Reference%20 Documents/IIS%20Capacity_Narrative%20MH.doc	Progress towards achievement of the objectives will be determined by the completion of the objectives identified in the Sentinel Site Plan-Capacity grant narrative.	Met	Work identified within the assigned grant completed within the constraints of the grant dates.

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POST-IMPLEMENTATION REPORT

Post-Implementation Reports are performed after a project is completed. A "PIR" is a process that utilizes surveys and meetings to determine what happened in the project and identifies actions for improvement going forward. Typical PIR findings include, "What did we do well?" "What did we learn?" "What should we do differently next time?" Notable findings are presented in this closeout report.

	What Went Wrong? or What Went Right?	Lesson Learned		
		(What behavior/action would have prevented or improved things? or What behaviors/actions should be repeated to promote success?)		
Partnership	NMIC employed new management early in the life of the project. There was a heavy focus on vendor/customer relationship rather than the collaborative partnership that had been in play for many years. The impacts of the vendor/customer focus negatively impacted several areas including overall project communications and resourcing.	Moving the NDIIS back to a more collaborative relationship with NDDoH and NMIC is key to the success of the NDIIS. The last few years, when we had a more vendor-customer relationship is when we encountered so many challenges and issues. As we have moved back to a more collaborative partnership things have already started to improve, work is being completed on time and team members aren't feeling as overwhelmed and frustrated. The collaborative partnership also makes it easier to find common resolutions when we do encounter issues and delays.		

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	What Went Wrong? or What Went Right?	Lesson Learned (What behavior/action would have prevented or improved things? or What behaviors/actions should be repeated to promote success?)
Communications	Many times throughout the life of the project, communications were strained and frequently lacking the detail needed to accurately respond to stakeholder questions.	Better, more timely and more detailed communication on projects is necessary to ensure work is done on time and within budget. The NDDoH team is the outward face of the NDIIS and the group that takes all the heat from NDIIS users when we promise work complete by a certain date and then miss the deadline. The team has moved to an easy to follow status reporting format; making discussions
		flow smoother and providing better visibility into status of project work.
Resourcing	Project work was often behind schedule and over budget as the result of resource issues. Nexus was brought on to supplement the NMIC development team; however, at the end of April 2017 the contract between them was unexpectedly dissolved by NMIC.	NMIC is working to improve resource allocations and is planning to incorporate the assistance of a Delivery Lead position, supplemented by Nexus.
Testing	Many issues in the connection management system were identified after the 1.5 messaging system was deployed to production.	NMIC has no mechanism for stress testing the system however, recognizes that software testing needs to improve for the messaging system. This includes load testing and evaluating database connection usage.

SUCCESS STORIES

Comments have been captured from the post-implementation survey and the lessons learned meeting:

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NDIIS 2 deployment with all of the major coding standardization work was seamless. Not a single NDIIS user even knew anything had been done when there was a ton of work that had been done. We never lost connectivity and we have only had one issue with all of the coding work that was complete.

The use of the nHAPI parser in the Release 1.5 messaging system is a huge improvement over the Release 1.4 messaging system parser.

Implementation of the school module has repeatedly generated positive feedback from the school users.

The architecture updates and system documentation were well organized and very thorough.